

On the solution of equations in . . . <sup>31918</sup>  
S/140/61/000/006/007/007  
C111/C444

where  $m_1, \dots, m_N$  are non-negative integers. The set of the functionals (1.1) forms a complete orthonormal system in  $L_2(C)$  such that to the functional  $F[x] \in L_2(C)$  the Fourier series

$$F[x] \sim \sum_{0 \leq (m) \leq N} A_{(m)} \Psi_{(m)}[x] = \sum_{\substack{0 \leq m_1 \leq N \\ \dots \\ 0 \leq m_N \leq N}} A_{m_1 \dots m_N} \Psi_{m_1 \dots m_N}[x] \quad (1.2) \quad \checkmark$$

is corresponding.

The functional  $F[x]$  is called functionally differentiable in  $C \rightsquigarrow I$ , if for all  $x, y \in C$  there exists the first variation

$$\delta F = \delta F[x|y] = \frac{\partial}{\partial h} F[x + hy] \Big|_{h=0} \quad (2.1)$$

which is representable in the form  $\delta F = \int_0^1 A[x|t] y(t) dt$ .

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If  $A[x|t]$  is measurable in  $C \times I$ , then it is called the functional derivative of  $F[x]$  in  $(x,t) \in C \times I$ ; in signs:

$$A[x|t] = \frac{\delta F}{\delta x(t)}.$$

In the present paper one considers the solution of

$$\frac{\delta F}{\delta x(t)} = \Phi[x|t] \quad (2.2)$$

in the class  $L_2(C)$ . The method of the author consists of the following facts: he represents the searched functional by the Fourier series ✓

$$F[x] \sim \sum A_{(m)} \Psi_{(m)}[x] \quad (2.3)$$

as well as the functional  $\Phi[x|t]$  is represented by a Fourier series, and then he makes a comparison of the coefficients. His method is based on

Theorem 2: Let  $F[x]$  be a functional of the class  $L_2(C)$  which is

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functionally differentiable in  $C \times I$ , its functional derivative for every  $t$  also belonging to  $L_2(C)$ , and being summable for every  $x \in C$  with respect to  $t$ . Besides let  $\sup_{t \in I} |\phi[x|t]|$  be  $W$ -summable. If then

$$F[x] \sim \sum_{0 \leq (m) \leq N} A_{(m)} \Psi_{(m)}[x]$$

X

then

$$\frac{\delta F}{\delta x(t)} \underset{L_2}{\sim} \sum_{0 \leq (m) \leq N} \left\{ \sum_{1 \leq i \leq \infty} c_i(t) \sqrt{m_i+1} A_{(m)+i} \right\} \Psi_{(m)}[x], \quad (3.8)$$

$\Psi_m[x]$  being the Fourier-Hermitian functionals, corresponding to the system

$$a_j(t) = \sqrt{2} \cos \frac{(2j-1)\pi t}{2}, \quad j = 1, 2, \dots \quad (1.5)$$

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The result of this investigation is summed up in Theorem 4.

Theorem 4: Let  $\phi[x|t]$  be an arbitrary generally complex functional of the class  $L_2(C)$  for every  $t$ ;  $\phi[x|t]$  be functionally differentiable

with respect to  $x$  and summable with respect to  $t$  for every  $x(\cdot) \in C$  with the property that  $\|\phi[\cdot|t]\| \in L_2(0,1)$  and  $\sup |\phi[x|t]|$  are  $W$ -summable, and  $\sup_{s \in I} \left| \frac{\delta \phi[x|t]}{\delta x(s)} \right|$  are  $W$ -summable, too, for every  $t$ .

Let further on be  $\frac{\delta \phi[x|t]}{\delta x(s)} \in L_2(C)$  for arbitrary  $(s,t) \in I \times II$  and summable with respect to  $s$  for every  $x$ , as well as for every  $(s,t,x) \in I \times I \times C$  holds

$$\frac{\delta \phi[x|t]}{\delta x(s)} \equiv \frac{\delta \phi[x|s]}{\delta x(t)}.$$

Then the equation

$$\frac{\delta F}{\delta x(t)} = \phi[x|t]$$

possesses a solution which is unique except for an additive constant

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On the solution of equations in . . .

in the class of the twice differentiable functionals of  $L_2(C)$  Besides:  
if the obtained functional is bounded:  $|F[x]| < A$ , and if

$\phi[x/t] \in L_2[0,1]$  for every  $x \in C$  then the problem may be posed

with the initial condition  $F[x_0] = f_0$ , the constant term of the  
expansion being calculated according to the following formula

$$A_0 = f_0 - \lim_{N \rightarrow \infty, \lambda \rightarrow 1-0} \sum_{\substack{0 \leq (m) \leq \infty \\ (m) \neq 0}} A_{(m)} \lambda^{m_1 + \dots + m_N} \Psi_{(m)}[x_0]$$

where  $\Psi_m[x]$  are the Fourier-Hermitian functionals corresponding to  
(1.5). (The  $A_{(m)}$  are the Fourier-Hermitian coefficients of  $F[x]$ ).

There are 4 Soviet-bloc and 8 non-Soviet-bloc references. The four  
most recent references to English-language publications read as  
follows:

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On the solution of equations in . . . <sup>31918</sup>  
S/140/61/000/006/007/007  
C111/C444  
J. Schwinger, Proc. Nat. Acad. Sci., 37, pp. 452, 1951; J. Schwinger,  
Proc. Nat. Acad. Sci., 37, pp. 455, 1951; R. H. Cameron, C. Hatfield,  
On the summability of certain ortogonal developments. Bull. Amer. Math.  
Soc. 55, pp. 131-145, 1949; R. H. Cameron, First variations of indefini-  
te Wiener integrals. Proc. Amer. Math. Soc., 2, pp. 914-924, 1951.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. J. Ul'yanova-  
Lenina (Kazan' State University im. V. J. Ul'yanov-Lenin)

SUBMITTED: March 7, 1960

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L 31062-65 EWT(d)/EWT(1)/EWG(v)/EEC(k)-2/EWA(d)/EEC-4/EEC(t)/EWA(h)  
Pn-4/Pe-5/Pg-4/Pae-2/Pt-10/Peb/Pi-4/Pl-4 JHB/GW/WS

ACCESSION NR: AR5004880

S/0058/64/000/011/H063/H063

SOURCE: Ref. zh. Fizika, Abs. 11Zh393

AUTHORS: Bel'kovich, O. I.; Sherstnev, A. N.; Volodin, I. N.

TITLE: Distribution of durations of meteoric radio echoes

CITED SOURCE: Sb. Meteorn. rasprostr. radiovoln. No. 1. Kazan',  
Kazansk. un-t, 1963, 111-114

TOPIC TAGS: meteoric radio echo, meteor<sup>12</sup> radar observation, meteoric  
radio scatter (1)

TRANSLATION: A formula is derived for the distribution of the duration of forward-reflected meteoric radio echoes from undercondensed trails, with account of the change in the pressure at the point of maximum ionization. By assuming the meteor mass distribution to obey a power law, with a probability density

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ACCESSION NR: AR5004880

$$f(m) = \frac{s-1}{m_0} \left( \frac{m}{m_0} \right)^s,$$

where  $m$  -- mass of the meteor corresponding to the minimum registered amplitude  $A_0$ , the authors obtained for the probability  $p$  of the duration distribution of the meteoric radio echoes an expression ( $t \geq a$  under the condition that  $t \geq t_{\min}$ )

$$p = \left\{ -\frac{3(s-1)}{2} \left( \sqrt{1 + \frac{4a}{3\tau_0}} - \sqrt{1 + \frac{4t_{\min}}{3\tau_0}} \right) \right\},$$

where  $\tau_0$  -- value corresponding to  $m_0$  and  $t_{\min}$  -- minimum duration of the radio echo registered by the radio apparatus. The plots presented for the duration distribution density of the radio echoes, as well as the histograms of forward reflections from 150 undercondensed meteor trails, yield good agreement between the theoretical and experimental results. G. Osipov.

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L 31062-65

ACCESSION NR: AR5004880

SUB CODE: AA, EC

ENCL: 00

Card

3/3

S/020/63/149/003/006/028  
B112/B180

AUTHOR: Sherstnev, A. N.

TITLE: Best approximation problems in random normed spaces

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 3, 1963, 539 - 542

TEXT: The author generalizes the problem of minimizing the random norm  $\|\varphi_0 - \sum_{k=1}^n c_k \varphi_k\| = P(\max_{0 \leq t \leq \tau} |\varphi_0 - \sum_{k=1}^n c_k \varphi_k| \geq x)$ , which is defined in the space  $C_{[0, \infty)}$ . Theorems of existence and uniqueness of the solutions are derived.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina (Kazan' State University imeni V. I. Ul'yanov-Lenin)

PRESENTED: October 6, 1962, by A. N. Kolmogorov, Academician

SUBMITTED: October 5, 1962  
Card 1/1

SHERSTNEV, A.N. (Kazan')

Some problems on optimum approximation in random normed  
spaces. Rev math Roum 9 no.8:771-789 '64.

SHERSTNEV, A.V.

Case of incrustrated parasitic cyst of the transverse mesocolon. Vest.  
rent. i rad. 36 no.4:81 J1-Ag '61. (MIRA 15:2)

1. Iz Zheleznorodozhnoy bol'nitsy stantsii Buzuluk (nachal'nik  
S.I.Dudos'). (MESENTERY-HYDATIDS)

SHERSTNEV, A.V.; SHELEPOV, A.V. (Buzuluk)

Clinicoröntgenological correlations in peptic ulcer in  
elderly persons. Klin. med. 41 no.7:133-137 J1'63  
(MIRA 16:12)

1. Iz Buzulukskoy mezhrayonnoy bol'nitsy (glavnyy vrach S.B.  
Kosinskiy).

SHERSTIKOV, A.V., inzhener; NAUMOV, A.G., inzhener

A new mechanized construction yard for making precast reinforced  
concrete structural elements and components. Mekh.stroi.12 no.11:  
3-7 N'55. (MIRA 9:1)

(Precast concrete)

SHERSTNEV, A.V., inzhener.

Manufacture of reinforced concrete posts and pipes by the press method  
("Press concrete")(from "Stavivo" no.7 '56). Mekh.stroi.13 no.12:26-  
27 D'56. (MIRA 10:1)  
(Czechoslovakia--Reinforced concrete)

SHERSTNEV, A. inzhener.

Reinforced concrete poles for street lighting. Stroitel'  
no.1:12-13 Ja '57. (MIRA 10:2)

(Electric lines--Poles)



SHERSTNEV, A.V.

~~Mechanized mass production of large wall blocks. Gor. khoz. Mosk. 31~~  
no.3:7-11 Mr '57. (MIRA 10:4)

1. Nachal'nik tekhnicheskogo otdela Glavmosshelozobetona.  
(Moscow--Concrete plants) (Building blocks)

SHERSTNEV, A.V. inzhener.

Production of large wall panels for housing construction in England.  
Gor.khoz.Mosk. 31 no.6:36-39 Je '57. (MIRA 10:7)  
(England--Precast concrete construction)

SHERSTNEV, A.V., inzh.

Assembly-line production of prestressed flooring panels. Gor. khoz.  
Mosk. 32 no.4:28-32 Ap '58. (MIRA 11:4)  
(Prestressed concrete)

SHERSTNEV, A.V., inzh.

Production of wall panels in Czechoslovak plants. Gor. khoz. Mosk.  
32 no.6:32-36 Je '58. (MIRA 11:7)  
(Czechoslovakia--Concrete blocks)

SHERSTNEV, A.V.

Automatic curing of reinforced concrete products in steam  
curing chambers. Bet.i zhel.-bet. no.1:11-15 Ja '60.

(MIRA 13:5).

1. Nachal'nik tekhnicheskogo otdela Upravleniya predpriyatiy  
sbornogo zhelezobetona Glavmospromstroyaterialov.  
(Concrete--Curing)

SHERSTNEV, A.V., inzh.

Plants manufacturing precast reinforced concrete products in  
England. Bet.i shel.-bet. no.7:333-336 J1 '60. (MIRA 13:7)  
(Great Britain--Precast concrete)

SHERSTNEV, A.V., inzh.

Plants manufacturing precast reinforced concrete in England.  
Bet. 1 zhel.--bet. no.8:384-388 Ag '60. (MIRA 13:8)  
(Great Britain--Precast concrete)

TSYGANKOV, TS.I., inzh., red.; SHERSTNEV, A.V., inzh., red.;  
STRASHNYKH, V.P., red. izd-va; KASIMOV, D.Ya., tekhn. red.

[Standards SN 220-62 for the technical design of enterprises  
producing precast reinforced concrete elements in multiple  
molds] Normy tekhnologicheskogo proektirovaniia predpriatii  
sbornykh zhelezobetonnykh izdelii s kassetnym sposobom proiz-  
vodstva (SN 220-62). Moskva, Gosstroizdat, 1962. 14 p.  
(MIRA 16:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam  
stroitel'stva.

(Concrete plants--Standards)



SHEISTNEV, A.V.

Postoperative pneumoperitoneum in an X-ray picture. Vest. rent.  
1 rad. 37 no.5:71 S-O '62. (MIRA 17:12)

1. Iz zheleznodorozhnoy bol'nitsy stantsii Buzuluk (nachal'nik  
S.I. Dudos').

SHERSTNEV, B. F., Cand Med Sci -- (diss) "Colpoabdominal diaphanoscopy in the diagnostics of disorders of extra-uterine pregnancy." Sverdlovsk, 1960. 15 pp; (Sverdlovsk State Medical Inst); 260 copies; price not given; (KL, 27-60, 160)

SHERSTNEV, Dmitriy Safrenovich; FEDOROV, Boris Dmitriyevich;  
RASHKOVSKIY, Ya.Z., redaktor; SLAVOROSOV, A.Kh., redaktor;  
NADEINSKAYA, A.A., tekhnicheskiy redaktor.

[Fundamentals of geodesy and mine surveying] Osnovy geodezii  
i marksheiderskego dela. Moskva, Ugletekhizdat, 1955. 203 p.  
(Surveying) (Mine surveying) (MLRA 9:1)

SHERSTNEV, D.S., inzhener.

Motion picture "Preliminary training in safety engineering in coal mines." Bezop.truda v prom. 1 no.7:39 J1 '57. (MIRA 10:7)  
(Coal mines and mining--Safety measures)  
(Motion pictures in industry)

SUMIN, I.P.; ZOL'NIKOV, V.V.; BAYEV, G.G.; SHERSTNEV, D.M.; LITVIN, I.F.

Improving boring and blasting operations. Ugol' 39 no.12:32-35  
D '64. (MIRA 18:2)

1. VaryvPEU Kombinata Kuzbassugol' (for Sumin, Zol'nikov, Bayev).
2. Trest Belovugol' (for Sherstnev). 3. Bachatskiy ugol'nyy  
kariyev (for Litvin).

SHERSTNEV, D.S., inzh.; SHEVERDIN, P.G.

Preventing the breakthrough of water into a mine from abandoned workings. Bezop. truda v prom. 5 no.8:3-4 Ag '61. (MIRA 14:8)

1. Gosgortekhnadzor USSR.  
(Coal mines and mining--Safety measures)

KAZAKEVICH, T.I.; SHERSTNEV, I.Ya.

Machining uneven surfaces on planing machines. Stan.1 instr. 24 no.11:  
35-36 N '53. .

(MLRA 6:12)  
(Planing machines)

AFONIN, Nikolay Semenovich; SHERSTNEV, I.Ya., red.; SAPAROVA, A.L., red.;  
LARIONOV, G.Ye., tekhn. red.

[Reliability of electric service to industrial plants] Nadezhnost'  
elektrosnabzheniia promyshlennykh predpriatii. Moskva, Gos. energ.  
izd-vo, 1958. 295 p. (MIRA 11:9)  
(Electric power distribution)



CHECHETKIN, Aleksandr Vasil'yevich; SKVORTSOV, S.A., kand. tekhn.  
nauk, retsenzent; SHERSTNEV, I.Ya., red.; FRIDKIN, L.M.,  
tekhn. red.

[High-temperature heat-transfer agents] Vysokotemperaturnye  
teplonositeli. Izd.2., perer. i dop. Moskva, Gosenergo-  
izdat, 1962. 423 p. (MIRA 15:12)  
(Heat--Transmission)

SHERSTNEV, K.M. (Kiyev)

The role of N.D.Strazhesko and his school in treating Soviet soldiers during the Great Patriotic War. Vrach.delo no.1:29-31 Ja '58.  
(MIRA 11:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut klinicheskoy meditsiny imeni akad. N.D.Strazhesko.  
(WORLD WAR, 1939-1945--MEDICAL AND SANITARY AFFAIRS)

SHERSTNEV, K.M.

Organizational and methodological work of the Ukrainian Institute of Clinical Medicine in the control of rheumatic fever and cardiovascular diseases in the Ukraine. Mat.po obm.nauch.inform. no.2: 177-180 '58. (MIRA 13:6)

1. Iz organizatsionno-metodicheskogo otdela (sav. - K.M. Sherstnev) Ukrainskogo nauchno-issledovatel'skogo instituta klinicheskoy meditsiny, Kiyev.

(UKRAINE--CARDIOVASCULAR SYSTEM--DISEASES)

(RHEUMATIC FEVER)

SHERSTNEV, K.M.; GUSEVA, I.S., kand.med.nauk

Distribution of cardiovascular diseases in the Ukrainian S.S.R.  
Mat.po obm.nauch.inform. no.2:173-176 '58. (MIRA 13:6)

1. Iz organizatsionno-metodicheskogo otdela (zav. - K.M. Sherst-  
nev) Ukrainskogo nauchno-issledovatel'skogo instituta klinicheskoy  
meditsiny, Kiyev.

(UKRAINE--CARDIOVASCULAR SYSTEM--DISEASES)

SHERSTNEV, K.M., (Kiyev)

History of training for military medicine in medical institutes.

Vrach.delo no.9:991-993 S'58

(MIRA 11:10)

1. Ukrainskiy institut klinicheskoy meditsiny imeni akademika  
N.D. Strazhesko.

(MEDICINE, MILITARY)

(MEDICINE --STUDY AND TEACHING)

SHERSTNEV, K.M.; GUSEVA, I.S., kand.med.nauk (Kiyev)

Study of the incidence of cardiovascular diseases and rheumatic fever in the urban population of Khmel'nitskiy Province in the Ukraine in 1956. Vrach.delo no.12:1313-1317 D '59. (MIRA 13:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut klinicheskoy meditsiny im. akad. N.G. Strazhesko.

(KHMEL'NITSKIY PROVINCE (UKRAINE)--CARDIOVASCULAR SYSTEM--DISEASES)

(KHMEL'NITSKIY PROVINCE (UKRAINE)--RHEUMATIC FEVER)

SHERSTNEV, K.M. (Kiyev)

Links between the Institute and institutions of public health;  
on the 25th anniversary of the Strazhesko Ukrainian Research  
Institute of Clinical Medicine. Vrach. delo no.8:107-110 Ag '61.  
(MIRA 15:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut klinicheskoy  
meditsiny imeni akademika N.D. Strazhesko.  
(UKRAINE--MEDICAL COLLEGES)

02910

S/194/61/000/011/037/070  
D256/D302

9.3/20 (1003, 1138, 1160)

AUTHOR: Sherstnev, L.G.

TITLE: Oxide-cathode surplus metal diffusion and the structure of the covering layer

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 11, 1961, 3, abstract 11 G18 (Tr. Mosk. energ. in-ta, 1961, no. 34, 307-314)

TEXT: The non-uniform density across the oxide layer and its porous structure influence the reliability of experimental investigations of strontium and barium diffusion in oxide cathodes. Diffusion investigation by means of evaporating a radioactive material on the surface and tracing its diffusion inside the layer is unsatisfactory and gives unreliable results. Accurate quantitative investigation of the surplus metal diffusion is possible either by controlling the layer density across its thickness or by fabricating an artificial layer structure with a uniform density. 3 references.

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Oxide-cathode surplus metal diffusion... <sup>12910</sup> S/194/61/000/011/037/070  
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See also abstracts 11 G19 and 11 G20. [Abstracter's note: Complete translation]

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32911

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D256/D302

7,3120(1003, 1138, 1160)

AUTHOR: Yakinov, N.N. and Sherstnev, L.G.

TITLE: Investigation of diffusion processes in oxide cathodes using radioactive tracers

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 11, 1961, 3, abstract 11 G19 (Tr. Mosk. energ. in-ta, 1961, no. 34, 315-322)

TEXT: Methods of investigating the surplus metal diffusion in the cathode oxide layer are described, based upon the application of radioactive tracers and using a modified medical microtome for cutting thin slices of the oxide cover. Two layers of carbonate were placed upon a flat surface of a nickel disc. The thin bottom layer (5 to 10  $\mu$ ) containing Ba<sup>140</sup> or Sr<sup>89</sup> was covered with a thick (~50 to 150  $\mu$ ) layer of the usual oxide paste. In order to find conditions for uniform density across the layer, covers were prepared charged uniformly with Sr<sup>89</sup>. The covers were pressed using 20, 40,

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Investigation of diffusion...

80, 180 and 280 kg/cm<sup>2</sup> pressure. They were then cut into slices 5 and 10  $\mu$  thick and their activity was measured. Starting from a pressure of 80 kg/cm<sup>2</sup> the density becomes practically constant. The 2-layer cathodes were mounted into experimental vacuum tubes of a special construction with a number of anodes providing for the separate collection of the cathode evaporation products during the decomposition of the carbonate and the activation of the cathode, as well as during the following operation of the cathode at various temperatures from 800 to 1400°K. After opening the tube the cathode cover was soaked with paraffin and cut into 5  $\mu$  slices. By measuring the activity of the slices the amount of metal transported by diffusion was determined (up to  $\sim 10^{-8}$ ). Examination of the method showed a good consistency of the results. 2 references. See also abstracts 11 G18 and 11 G20. [Abstracter's note: Complete translation]



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52912

S/194/61/000/011/034/070  
D256/D302

9, 3120 (1603, 1138, 1169)

AUTHOR: Sherstnev, I.G.

TITLE: Some results of an experimental investigation of barium and strontium diffusion in oxide cathodes

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no.11, 1961, 5, abstract 11 G20 (Tr. Mosk. energ. in-ta, no. 54, 323-334)

TEXT: The diffusion of Ba and Sr through the oxide layer from the core of the cathode and layer surface was investigated, taking into account the non-uniformity of the layer density and its porous structure and using radioactive tracers and microtome slicing. Investigation of the diffusion curves leads to a conclusion that at least two processes are responsible for transportation of barium. The first, a comparatively slow process, is responsible for transportation of most of the metal by diffusion through the crystalline structure of  $(BaSr)O$ . The second is a more rapid process connected

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S/194/61/000/011/059/070  
D256/L302

Some results of an experimental...

with the diffusion of Barium on the surface of the oxide grains.  
Similar results were obtained for strontium. 6 references. See  
also abstracts 11 G18 and 11 G19. [Abstracter's note: Complete  
translation.]

X

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KALIBERDA, V.M., kand. sel'skokhoz. nauk; SULIMOVSKIY, I.G., kand. sel'skokhoz. nauk; BUKHAN'KO, Ye.P.; LOGVINENKO, V.A., agronom; KOVALENKO, A.P.; PODGORNYY, P.I., prof. zasluzhennyy deyatel' nauki Ukrainskoy SSR; FEDOTOV, V.A., aspirant; KURBATOV, I.D., agronom; KOZEYEV, V.I.; SHCHETININ, A.I.; KORCHAGIN, V.A., kand. sel'skokhoz. nauk; SOGURENKO, V.P.; KOSTROV, K.A., kand. sel'skokhoz. nauk; DULYA, F.M.; SHERSTNEV, N.F., aspirant

Crops preceding winter crops in various zones. Zemledelie 27 no.7:  
26-45 J1 '65. (MIRA 18:7)

1. Ukrainskaya sel'skokhozyaystvennaya akademiya (for Kaliberda).
2. Odesskiy sel'skokhozyaystvennyy institut (for Sulimovskiy).
3. Odesskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya (for Bukhan'ko).
4. Kolkhoz imeni Kirova, Mar'inskogo rayona Donetskoy oblasti (for Logvinenko).
5. Donetskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya (for Kovalenko).
6. Voronezhskiy sel'skokhozyaystvennyy institut (for Fedotov).
7. Alekseyevskoye rayonnoye proizvodstvennoye upravleniye sel'skogo khozyaystva, Belgorodskoy oblasti (for Kurbatov).
8. Bezenchukskaya sel'skokhozyaystvennaya opytnaya stantsiya (for Korchagin).
9. Direktor Bykovskoy opytnoy stantsii bakhchevodstva (for Sogurenko).
10. Mordovskaya sel'skokhozyaystvennaya opytnaya stantsiya (for Kostrov).
11. Direktor sovkhoza "Khleborobnyy", Smolenskogo rayona, Altayskogo kraya (for Dulya).
12. Altayskiy sel'skokhozyaystvennyy institut (for Sherstnev).

SHERSTNEV, N.M.

Studying causes of well cave-ins. Azerb.neft.khoz. 35 no.8:  
6-8 Ag '56.

(MLRA 9:10)

(Oil well drilling) (Petroleum engineering)

PROTASOV, G.N., kand.tekhn.nauk; SHERSTNEV, N.M., inzh.

Study of causes of caving in wells and preventive methods. Trudy  
AzNII DN no.5:7-23 '57. (MIRA 12:4)  
(Petroleum engineering)



PROTASOV, G.N., kand.tekhn.nauk; RUSTAMBEKOV, G.N., inzh.; BARAYEV, N.B.,  
inzh.; SHERSTNEV, N.M., inzh.

Consolidated data on well sinking in the Kura Lowland and recommendations for increasing drilling rates and lowering the cost of drilling operations in the Kyurovdag field. Trudy AzNII DN no.5: 24-68 '57. (MIRA 12:4)

(Kura Lowland--Production methods)

SHERSTNEV, N.M., inzh.

Effect of the chemical treatment of clay-base fluids on the  
peptization resistance of clay rocks. Trudy AzNII DN no.5:101-120  
'57. (MIRA 12:4)

(Oil well drilling fluids)  
(Clay)

SHENKOV, N. I., Grad. Tech. Sci.--(Sci.) "Analysis of drilling and  
the study of landslide phenomena under geologic<sup>1</sup>/complicated conditions."  
Mosc., 1957. 11 pp (Min. of Higher Education USSR. Academy Order  
of the Central Planning Industrial Inst. in N. Anisimov), 100 copies {  
(B, 21-50, 110)

14(5)

SOV/92-58-11-7/36

AUTHORS: Sherstnev, N.M., Engineer and Petrosyan N.M., Chief of the Production and Technical Section of a Drilling Office

TITLE: Selection and Consumption of Drill Bits (O podbore i raskhode burovykh dolot)

PERIODICAL: Neftyanik, 1958, Nr 11, pp 8-10 (USSR)

ABSTRACT: According to this article the drilling speed depends on the proper selection of the bit which is to be used for perforating a particular formation. V.I. Tarasevich and N.N. Yadulayev devoted their study to the question of how much the depth at which wells are drilled at the Apsheron peninsula affected the per bit footage. Tarasevich came to the conclusion that the per bit footage changes with the drilling depth, and that this change has either a linear or a hyperbolic character. On the other hand, the analysis of Yadulayev led to the conclusion that this change has a parabolic character, and that the following equation can be used to determine how much the depth affects the per bit footage:

$$L = An^k (1)$$

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SOV/92-58-11-7/36

# Selection and Consumption of Drill Bits

Where  $L$  is the depth,  $n$  the number of bits,  $A$  - the coefficient, and  $k$  the exponent. The analysis of the used bits has confirmed the above-mentioned dependence and is shown by graphs in Fig. 1. It is based on the experience of using different bits in drilling the formations at the Prikurinsk depression. This dependence can be characterized as follows:

for bit No 10	$L = 418$	$n .422$ (2)
12	$L = 297$	$n .632$ (3)
14	$L = 150$	$n .83$ (4)

Therefore in order to determine how much the drilling depth affects the per bit footage it is necessary to take into account, among other factors, the size of the bit. As a rule, the hardness of the rock increases with depth, but other factors also affect tectonics of formation as well. The authors analyzed the material relating to bits after they had been used for drilling wells at the Kyurovdag platform. The results of this analysis is shown in Table 1.

Card 2/3

14(5)

SOV/92-58-11-7/36

### Selection and Consumption of Drill Bits

The parabolic dependence of curves in Fig. 2 and 3 is confirmed and can be indicated by the following equation:

$$\begin{array}{lcl} n = 1.8 \cdot 10^{-6} & \begin{array}{l} \downarrow \\ \downarrow \end{array} & \begin{array}{l} 2.14 \\ 1.897 \end{array} \quad \begin{array}{l} (5) \\ (6) \end{array} \\ n = 7.5 \cdot 10^{-6} & & \end{array}$$

In view of the varying hardness of rocks it is advisable to apply equations (5) and (6) for determining the number of bits needed to drill wells at the Kyurevdag platform. Moreover, the selection of bit cutters is also a factor of importance. In Table 2 the authors show the number of bits needed to drill a well as determined by the equation (6). In Table 3 the authors specify the percentage of sand and clay in formations of various horizons of the above-mentioned platform. There are 3 figures and 3 tables.

ASSOCIATION: Otdel bureniya AzNII i kontora bureniya tresta AzMNP (The AzNII Drilling Section, and the Production and Technical Section of the AzMNR Trust)

Card 3/3

SHARUTIN, A.S.; SHERSTNEV, N.M.

Lowering of hydrostatic pressure in wells when drilling through  
highly absorptive horizons. Azerb. neft. khoz. 39 no.6:11-14 Je  
'60. (MIRA 13:10)

(Hydrostatics)

SHERSTNEV, N.M.; PROTASOV, G.N.; ASKEROV, K.A.

Possibility of using weighting agents. Azerb. neft. khoz. 40  
no.6:14-16 Je '61. (MIRA 14:8)  
(Oil well drilling fluids)



KASUM-ZADE, D.S.; YADULLAYEV, N.N.; SHERSTNEV, N.M.; ASKEROV, K.A.;  
DASHDAMIROV, F.A.; BAGIRYANTS, R.S.

Analysis of the performance of reduced-diameter bits and the  
effectiveness of their use in the area of the Darwin-More Shoal.  
Azerb.neft.khoz. 40 no.12:23-26 D '61. (MIRA 15:8)  
(Apsheron Archipelago--Oil well drilling, Submarine)

RUSTAMBEKOV, A.F.; KASUMAZADE, D.S.; YADULLAYEV, N.N.; ASKEROV, A.G.;  
SHERSTNEV, N.M.

Practices in drilling wells of a simplified structure under  
complex geological conditions in the Kyanizadag area. Azerb.  
neft. khoz. 42 no.1:16-18 Ja '63. (MIRA 16:10)

(Azerbaijan--Oil well drilling)

SEID-KZA, M.R.; SHERSTNEV, M.M.; YAKUBAYEV, M.N.; KHANHATUROV, A.A.

Effect of the magnetization of a drilling tool on the occurrence  
of complications. Buroie no.11:12-14 '64.

(MIRA 18:5)

1. AzNIIfurteft'.

KASUM-ZADE D.S.; YADULLAYEV, N.N.; SHERSTNEV, N.M.; DZHALILOV, N.M.;  
TSYPIN, S.B.

Analyzing the performance of bits and turbodrills in the  
Kyurovdag area. Sbor. nauch.-tekh. inform. Azerb. inst.  
nauch.-tekh. inform. Ser. Neft. prom. no.6:36-41 '63.  
(MIRA 18:9)

SHERSTNEV, N.M., ASKEROV, A.G., RAGIMOV, N.A.

Water permeability of clay coatings. Sbor. nauchl.-tekhn. inform.  
Azerb. inst. nauch.-tekhn. inform. Ser. Neft. prom. no.6:86-94 '63.  
(MIRA 18:9)

ABDULATY, N.M.; DEDDINHO, G.Ya.; KADAEV, S.A.

Using hydrocyclones for removing sand and borings from light-weight muds. Sbor. nauch.-tekh. inform. Azerb. inst. nauch.-tekh. inform. Ser. Neft. prom. no.6:68-78 '67. (MIRA 18:9)

SHERSTNEV, N.V.

New labor conditions in Pechora Basin mines. Ugol' 33 no.9:3-5  
S '58. (MIRA 12:1)

1. Deputat Verkhovnogo Soveta SSSR, nachal'nik kombinata Vorkutugol'  
(Pechora Basin--Coal mines and mining)

KHOKHLOV, Ivan Vasil'yevich; zasluzhennyy deyatel' nauki i tekhniki Komi ASSR; SHERSTNEV, Nikolay Vasil'yevich, inzh.; FEDANOV, Vladimir Petrovich, inzh., zasluzhennyy deyatel' nauki i tekhniki Komi ASSR; ZAYTSEV, Sergey Ivanovich, inzh.; SEREBRYANYI, A.G., otv.red.; OKHRIMENKO, V.A., red.izd-va; SABITOV, A., tekhn.red.

[Mining of Pechora Basin coal deposits] Razrabotka ugol'nykh mestorozhdenii Pechorskogo basseina. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1960. 289 p.

(MIRA 13:12)

(Pechora Basin--Coal mines and mining)



BUZHEVICH, G.A., kand.tekhn.nauk; SKRAMBAYEV, B.G., prof., red.;  
CHERKINSKAYA, R.L., red.izd-va; SHERSTNEVA, N.V., tekhn.red.

[Studies of coarse-pored concrete based on porous aggregates]  
Issledovaniia po krupnoporistomu betony na poristykh zapolniteliakh.  
Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam,  
1962. 129 p. (Akademiia stroitel'stva i arkhitektury SSSR.  
Institut betona i zhelezobetona, Perovo, no.12). (MIRA 15:8)

1. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury  
SSSR (for Skrambayev).

(Lightweight concrete)

DYRIN, T.Ye.; SHERSTNEV, V.P.; STARETS, R., red.; ANISIMOVA, R.,  
tekhn.red.

[Machinery and electric industries of Tajikistan] Mashino-  
stroitel'naia i elektrotekhnicheskaja promyshlennost' Tadjhiki-  
stana. Stalinabad, Tadjhikgosizdat, 1961. 34 p.

(MIRA 14:2)

(Tajikistan--Machinery industry)  
(Tajikistan--Electric industries)

SHPAYER, A.M.; SHERSTNEV, V.Ye. (Moskva)

Speed up the introduction of practical widths in fabrics manufacture.  
Shvein.prom. no.5:8-10 S-O '60. (MIRA 13:12)  
(Textile fabrics)

USSR/Plant Physiology - Photosynthesis.

I-1

Abs Jour : Ref Zhur - Biol., No 5, 1958, 19909

Author : Sherstnev, E.A.

Inst : -

Title : The Derivation of Starch Containing Radioactive Carbon  
C<sub>14</sub> with the Aid of Photosynthesis.

Orig Pub : Bot. zh., 1957, 42, No 3, 450-453

Abstract : A method of obtaining radioactive starch with the aid of photosynthesis of isolated leaves exposed to the air containing C<sup>14</sup>O<sub>2</sub> was described. A small beaker containing 200-400 M curie of NaHC<sup>14</sup>O<sub>2</sub> and BaCO<sub>3</sub> was placed at the bottom of a vacuum-exsiccator, the purpose being that CO<sub>2</sub> be equal to 10% of the atmosphere of the container. Petrie dishes filled with water were set on the base of the exsiccator. Discs, cut out from previously shaded leaves, were placed on the surface of the water.

Card 1/2

AUTHOR: Sherstnev, Ye. A.

20-119-4-34/60

TITLE: On the Influence Produced by Carnosin Upon  
Phosphorylation Processes in Muscular Tissue  
(O vliyani karnozina na protsessy fosforilirovaniya  
v myshechnoy tkani)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 4,  
pp. 753-755 (USSR)

ABSTRACT: Since carnosin as well as its methyl derivative anserin  
have been discovered several researchers have tried to  
explain their biological rôle. (references 1 - 3). Since  
these two dipeptides are found mainly in the skeletal  
muscles the assumption is probable that they are connected  
somehow with the biological activity of the muscle fibre.  
The assumption that these dipeptides take part analogously  
to creatin in the energetic exchange, i. e. the  
phosphorylation process of the muscular tissue, was very  
tempting. A survey of the papers hitherto published on  
this problem (references 3 - 6) is given. It was the  
author's object to study the influence mentioned in the

Card 1/4

On the Influence Produced by Carnosin Upon  
Phosphorylation Processes in Muscular Tissue

20-119-4-34/60

processes observed by other authors is, according to the experimental results of the author, due to the buffer properties of carnosin. The buffer capacity of the system is increased by carnosin. This prevents an abrupt displacement of the  $pH$ -medium in the acid direction. The last circumstance favors for its part the two processes in question. 3) The same processes take place in the MOP tumors as well as in the muscles of rabbits suffering from "Broun-Pirs" tumor on a somewhat lower level than in the case of healthy animals. Thus the biological rôle of carnosin remains unclear. This topic was suggested by professor A. N. Parshin and the work was carried out under his control. There are 2 tables and 10 references, 8 of which are Soviet.

ASSOCIATION:

Institut onkologii Akademii meditsinskikh nauk SSSR  
(Institute of Oncology of the Academy of Medical  
Sciences USSR)

Card 3/4

On the Influence Produced by Carnosin Upon  
Phosphorylation Processes in Muscular Tissue

20-119-4-34/60

PRESENTED: December 2, 1957, by K. M. Bykov, Member, Academy of  
Sciences, USSR

SUBMITTED: April 20, 1957

Card 4/4

100-100000, 100-100000, 100-100000, 100-100000 (1000)

"The Site of Hormone Synthesis in the Body."

Report presented at the 5th International Biochemistry Congress,  
Vienna, 10-16 August 1964



Glomerular function in the liver and muscles of the frog.  
Biol. J. Zool. Soc. Lond. 300-305 (1961). (JHE: 14:11)

1. The epidemiologic evidence indicates that the risk of developing a second primary tumor is increased in patients with a history of a primary tumor, particularly if the second tumor occurs within 10 years of the first tumor.

(C-1)  
(L-1)  
(M-1)

SHERSTNEV, Ye.A.; KURILENOK, G.V.

Effect of boron on the content of free amino acids and on the incorporation of  $C^{14}$ -tyrosine into the proteins of the sunflower. Bot. zhur. 49 no.5:699-702 My '64. (MIRA 17:8)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.

MAKAROVA, T.F.; SHEPOTNEV, Yu.A.

Composition and biosynthesis of free ribonucleotides in  
sunflower leaves. Fiziol.rast. 12 no.4:618-623 Jul-Aug '65.  
(Mik 72:13)

L. Botanicheskii institut imeni V.L.Komarov AN SSSR, Leningrad.  
Submitted October 15, 1964.

BUSHMANOV, B.N.; SHERSTNEV, Yu. V.

Using electronic zero-indicators for some laboratory experiments  
in electricity. Trudy KAI 29:105-108 '55. (MLRA 10:6)  
(Electronic instruments)

SHERSTNEV, Ye.A.; KURILENOK, G.V.

Effect of boron on the incorporation of adenine- $C^{14}$  into the  
ribonucleic acid of sunflower leaves and roots. Dokl. AN SSSR  
142 no.5:1201-1202 F :62. (MIRA 15:2)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR. Predstavleno  
akademikom A.I.Oparinym.

(Plants, Effect of boron on)  
(Nucleic acid metabolism)

SHERSTNEVA, A.

Kola Valley - Fur Farming

On the shores of the Kola. Sov. zhen.  
No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952 ~~1953~~, Uncl.

SHERSTNEVA, D.I., arkhitektor

In the northern district of Novyye Cheremushki. Gor.khoz.Mosk. 35  
no.7:15-19 JI 161. (MIRA 14:7)  
(Moscow--City planning)

KUDRYAVITSKIY, G.Ya.; LINCHEVSKAYA, A.P.; ALEKSEYENKO, Z.N.; ANTSIFEROV,  
D.P.; SVECHKAREVA, L.I.; DMITRIYEVA, V.I.; SHERSTNEVA, N.A.;  
POPOVA, Ye.V.; TSOGOYEV, N.V., red.; GRISHNYAYEV, B.G., tekhn.red.

[Economy of Stavropol Territory; a statistical manual] Narodnoe  
khoziaistvo Stavropol'skogo kraia; statisticheskii sbornik.  
Krasnodar, Gosstatizdat, 1959. 310 p. (MIRA 13:6)

1. Stavropol'skiy kray. Statisticheskoye upravleniye. 2. Sta-  
tisticheskoye upravleniye Stavropol'skogo kraya (for Kudryavitskiy,  
Linchevskaya, Alekseyenko, Antsiferov, Svechkareva, Dmitriyeva,  
Sherstneva, Popova). 3. Nachal'nik Statisticheskogo upravleniya  
Stavropol'skogo kraya (for TSogoyev).  
(Stavropol Territory--Statistics)



STRASHENK, V.P., red.izd-va; SHERSTNEVA, N.V.

[Instruction for the use of silicate paints in construction]  
Instruktsiia po primeneniiu silikatnykh krasok v stroitel'-  
stve. Moskva, Gosstroizdat, 1963. 8 p. (MIRA 17:1)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam  
stroitel'stva.

(Painting, Industrial--Equipment and supplies)

Phagocytosis

Effect of chemical and electric narcosis on phagocytosis, Arkhiv pat., 1<sup>4</sup>, No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952, Unclassified.

SHERSTNEVA, O.S.

Relation of the phagocytic reaction of leukocytes to their  
carbohydrate metabolism. [with summary in English]. Biul. eksp.  
biol. i med. 45 no.3:67-69 Mr'58 (MIRA 11:5)

1. Iz kafedry normal'noy fiziologii (zav. prof. A.A. Zubkov)  
Kishinesvskogo meditsinskogo instituta. Predstavlena deystvitel'ny  
chlenom AMN SSSR V.N. Chernigovskim.

(PHAGOCYTOSIS, effect of drugs on,  
glucose & insulin (Rus))

(GLUCOSE, effects  
on phagocytosis (Rus))

(INSULIN, effect  
same)

SHERSTNEVA, O.S.

Phagocytic activity of leukocytes in experimental diabetes and radiation sickness. Biul. eksp. biol. med. 47 no.5:56-60 My '59.  
(MIRA 12:7)

1. Iz kafedry normal'noy fiziologii (zav. - prof. A.A. Zubkov) Kishinevskogo meditsinskogo instituta. Predstavlena deystvitel'nyy chlenom AMN SSSR V. N. Chernigovskim).

(DIABETES MELLITUS, exper.

phagocytosis in irradiated animals (Rus))

(RADIATIONS, eff.

phagocytosis in diabetic irradiated animals (Rus))

(PHAGOCYTOSIS,

in diabetic irradiated animals (Rus))

SHERSTNEVA, O.S.

Dependence of the phagocytic activity of leukocytes on their respiratory phosphorylation. Biul. eksp. biol. i med. 50 no.7:64-66 JI '60.  
(MIRA 14:5)

1. Iz kafedry normal'noy fiziologii (zav. - prof. A.A.Zubkov)  
Kishinevskogo meditsinskogo instituta. Predstavlena deystvitel'ny  
chlenom AMN SSSR V.V. Parinym.  
(PHAGOCYTOSIS) (LEUKOCYTES)

SHERSTNEVA, O.S.

Effect of continuous lowering of metabolic energy in the focus of the inflammation on the course and morphological picture of experimental aseptic inflammation. Zdravookhranenie 4 no.5:38-42 S-O '61. (MIRA 14:11)

1. Iz kafedry normal'noy fiziologii (zav. prof. A.A.Zubkov)  
Kishinevskogo meditsinskogo instituta.  
(INFLAMMATION) (METABOLISM)

ALFEROVA, A.A., kand.tekhn.nauk; BONDAREVA, T.N.; SHERSTNEVA, V.A., inzh.;  
IVANSKAYA, L.N., inzh.; GUSHCHINA, L.I.

Amount of acid waters formed in the manufacture of fatty acids.

Masl.-zhir.prom. 29 no.11:40-43 N '63.

(MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrologii Akademii stroitel'stva i arkhitektury SSSR (for Alferova, Bondareva). 2. Volgodonskoy filial Vsesoyuznogo nauchno-issledovatel'skogo i proyektnogo instituta sinteticheskikh zhirozameniteley (for Sherstneva, Ivanskaya, Gushchina).

CHEREPAKHIN, N.A.; SHERSTNYAKOV, V.F.

Possible errors in determining some exploitation indices field  
studies. Neft. khoz. 39 no.2:51-54 F '61. (MIRA 17:2)



SHERSTNYAKOV, V.F.; KARPOV, V.P.

Two methods for solving the equations of the flow of bubble  
point oil. Nauch.-tekh. sbor. po dob. nefiti no.16:8-13 '62.  
(MIRA 15:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.  
(Oil reservoir engineering)

SHCHETNIAPOV, V.P.; KHARCHENKO, V.M.

Investigating the flooding of live crude. Nauch.-tekhn.  
stor.poz.dob.nefti no. 18:42-48 '62. (MIRA 17:6)

SHERSTNYAKOV, V.F.; BOKSERMAN, A.A.

Volumetric elasticity of bubble-point oil. Nauch.-tekhn.  
sbor. po dob. nefi no.21:30-33 '63. (MIRA 17:5)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy  
institut.

[illegible]

Determining phase permeabilities from field data. Nauch.  
tekhnol., po dobytiyu naft. 18:36-42 '62. (MIRA 17:6)

SHERSTINZAKOV, V.F.

Equations for the development of oil fields under composite  
conditions. Nauch.-tekh. sbor. po. dob. nefiti no.24:74-79 '64.  
(MIRA 17:10)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

ANNUNCIATION, V.F.

Possibility of applying the theory of frontal drive to calculations  
of the gas drive of trapped oil. Nauchn.-tehn. zhurn. po nefti  
no. 25:65-70 '64. (NIPA 17:12)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

MELEK-IAOVIT, V.S.; KONDITOV, M.S.; LICHKOV, V.R.; GOMEROV, V.K.;  
MELICHKOV, M.A.; KHORICHKO, S.T.; SHEESTNYAKOVA, L.G.

Oil field of pools developed for a long period of time on the  
basis of geological field data. Trudy VIII no.43:2-106 '65.  
(MIRA 18:6)

SUVOROV, K.; SHERSTOBITOV, I.

Effect of friction in the diaphragm clamping on the accuracy of the readings of manometric instruments. Vestis Latv ak no.4: 49-52 '62.

1. Institut avtomatiki i mekhaniki AN Latvyskoy SSR.



L 26955-65 EWT(m)/EPF(c)/T Pr-4 BW/DJ

ACCESSION NR: AT5003524

S/2681/64/000/011/0173/0190

AUTHOR: Sherstobitov, I. I.

TITLE: Determination of the characteristics of a corrugated membrane with account of the effect of the friction forces in the clamping frame

SOURCE: AN LatSSR. Otdeleniye fizicheskikh i tekhnicheskikh nauk. Voprosy dinamiki i prochnosti, no. 11, 1964, 173-190

TOPIC TAGS: corrugated membrane, friction, clamped membrane

ABSTRACT: The article deals with the characteristics (load vs. displacement of the center) of corrugated membranes in the presence of finite friction force in the clamping device. The general formulation of the problem is analogous to that used in a preceding article in the same source. The solution is made up of two parts, one for the clamp and one for the corrugated membrane. Each problem

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ACCESSION NR: AT5003524

is solved accurate to one constant, after which the two solutions are joined together and made continuous on the internal contour of the clamp and the required constants are then determined. This establishes the dependence of the sag of the center of the membrane on the variable external load, with account of the friction force. A numerical example is given in the conclusion and the causes of some deviations from the actual results are discussed. Orig. art. has: 2 figures and 66 formulas.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: AS

NR REF SOV: 005

OTHER: 000

Card

2/2

SHERSTOBITOV, I.N.

Let us save 10 million kw.-hr. Elek. i tepl. tiaga 4 no. 4:16 '60.  
(MIRA 13:6)

1. Zamestitel' nachal'nika 3-go uchastka energosnabzheniya,  
stantsiya Berdyaush, Yuzhno-Ural'skaya doroga.  
(Electric power)

L 00098-66 EWT(1)/EPA(s)-2

ACCESSION NR: AP5017466

UR/0144/65/000/006/0694/0701  
621.316.3+621.314.2

AUTHOR: Sherstobitov, I. S. (Candidate of technical sciences, Senior research associate)

TITLE: Some peculiarities of commutation in rotary inverters with singly-split poles

SOURCE: IVUZ. Elektromekhanika, no. 6, 1965, 694-701

TOPIC TAGS: inverter, rotary inverter, commutation

ABSTRACT: Some considerations are set forth re the commutation conditions in 2-winding rotary inverters with singly-split poles. At constant d-c and a-c voltages and frequency, the reaction mmf has the same direction as the d-c mmf, this fact hampering the commutation. However, by properly choosing the direction of rotation and by providing commutating poles (partial-pole fluxes linked with d-c winding rotate in opposite directions), both the field current/load-current characteristic and the commutation can be made satisfactory. The theoretical considerations were verified by some experiments with a 1.5-kw, 8000-rpm, 115-vac, 27-vdc rotary inverter. Orig. art. has: 4 figures and 20 formulas.

Card 1/2